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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/748,166	12/27/00	YAMAZAKI	S 0756-2235

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MM91/0523

EXAMINER	
NGUYEN, D	
ART UNIT	PAPER NUMBER
2871	

DATE MAILED:
05/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/748,166	Yamazaki
Examiner	**Art Unit**
Dung Nguyen	2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *109-132* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *109-132* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. *09/045,697*.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the light-emitting layer and the pixel electrode of the driving circuit must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 109-132 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claims 109, 113, 117, 121, 125 and 129, it is confusing and unclear how an active matrix circuit and a driving circuit can be included a light-emitting layer. It should be noted that the active matrix circuit and the driving circuit are just used to drive the light-emitting layer. In addition, regarding claim 125, it is unclear what is meant by "a pixel electrode" of the driving circuit. It should also be noted there is no pixel electrode in the driving circuit and the driving circuit is just used to drive the thin film transistor (TFT) of the active-matrix circuit. Therefore, while applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term, *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "the active matrix circuit comprising" or "the driving circuit comprising" in such above claims are used by the claims to mean "a circuit of the active matrix region comprising or the circuit of the driver region comprising" while the accepted meaning is "a display device comprising". Correction to the language is suggested to clarify the claimed subject matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 109-132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada, US Patent No. 6,114,715, in view of Kondo et al., US Patent No. 5,117,299.

Regarding claims 109-111, 113-115, 117-119, 121-123, 125-127 and 129-131, Hamada discloses an electroluminescene display comprising an active-matrix circuit and a driving circuit, each circuit having at least a TFT (43) formed over a substrate (102), a first insulating layer (49) formed over the TFT, a second insulating layer (54) formed over the first insulating layer, a pixel electrode (103) and a light-emitting layer (106).

However, Hamada fails to disclose an organic resin based material for the first insulating layer as well as a diamond like carbon (DLC) material for the second insulating layer. Kondo et al. disclose that the hard carbon film which is diamond-like carbon film having SP^3 bonds (Fig. 2 and 3) can be used as the insulator layer (column 4, line 27). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the interlayer insulating by using carbon film which can be used as a light blocking layer, in order to provide the LCD device of low cost with no picture quality deterioration (column 2, line 41-44). In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an organic resin (e.g., polyimide, acryl resin) based material for the insulating layer as the insulating layer 54 (Hamada, figure 8) because the use of one conventional material over another merely depends on the desire of the manufacturer and/or the availability and practicality of the material for the chosen manufacturing process.

Regarding claims 112, 116, 120, 124, 128 and 132, the modification to Hamada disclose the claimed invention as described above except for the application of the display in a portable information processing terminal, a head mount display, a projector, etc. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a display as the display in a portable information processing terminal, a projector, etc, since it is commonly used in display devices which have limited battery lifetimes in order to reduce power consumption.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 109-132 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 90-91 and 97 of U.S. Patent No. 6,115,090

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the patent and the application disclose the same display device.

10. Claims 109-132 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 09/295,397. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications disclose the same display device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dung Nguyen whose telephone number is (703) 305-0423.

DN
05/17/2001

William L. Sikes
Supervisory Patent Examiner
Group 2871